

PORTLAND FIRE WEATHER - 2003 ANNUAL REPORT

FORECASTS AND SERVICES

SPOT FORECASTS

The 2003 fire season was another busy year for spot forecast services. The Portland office issued 249 spot weather forecasts, a slight decrease from 2002 (270 spots). The spot totals for 2002 and 2003 were much higher than previous years. Figures 2 and 3 show the 2003 spot breakdown, by month, and the annual spot summary since 1991, respectively.

This year wildfire spot forecast were slightly higher than prescribed burn forecasts (132 vs. 114). The 132 wildfire spot forecasts were slightly lower than 2002, but well above the average from 1991-2001. Many wildfire spots were for initial attack activities. Surprisingly, September and October were the busiest months. There were 53 spot forecasts in September (49 for wildfires) and 38 in October. The biggest contributor to the September wildfire total was the B&B complex. The latter half of October was a busy period for prescribed burns. There were 29 total spots for prescribed burns, 25 of those occurring after October 20. Prescription activities were also concentrated in May, with 32 spot issuances.

INTERESTING SPOT FORECAST TIDBITS FOR 2003

- K The **FIRST** prescribed burn spot request was January 20, 2003. Salem BLM made the request for the Seed Orchard Pile burn. There were four spot requests in January and three more in February. The **LAST** prescribed burn request was November 5, 2003. The Warm Springs BIA made the request for a project called Middle Butte.

- K The **FIRST** wildfire spot was issued June 18, 2003 for a small fire, 2.5 acres, (Incident 294) on the Fort Rock district of the Deschutes National Forest. The **LAST** wildfire spot forecast was issued October 10, 2003 for the B&B East fire (mop-up operations) on the Sisters district of the Deschutes National Forest.

- K Most spot forecasts in one day: 6 on May 29, 2003 and September 3, 2003. Five spots were issued on October 21 and 27, 2003.

- K There were 215 spot requests from the USFS, a 31% increase from 2002. The 215 spots were divided into 123 wildfire requests and 92 prescribed burn

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requests. The BLM made 20 requests, all for prescribed burn projects. ODF had 7 wildfire requests, WA-DNR had two wildfire requests, and the Warm Springs BIA made two prescribed burn requests. There were a couple miscellaneous requests for search-and-rescue missions and also a hazardous spill incident.

- K The 215 USFS spot requests were divided amongst the forests as follows: 111 for the Deschutes, 82 for the Willamette, and 22 for the Mt. Hood. The Gifford Pinchot **DID NOT** make a spot request during 2003.

TURN-AROUND TIME

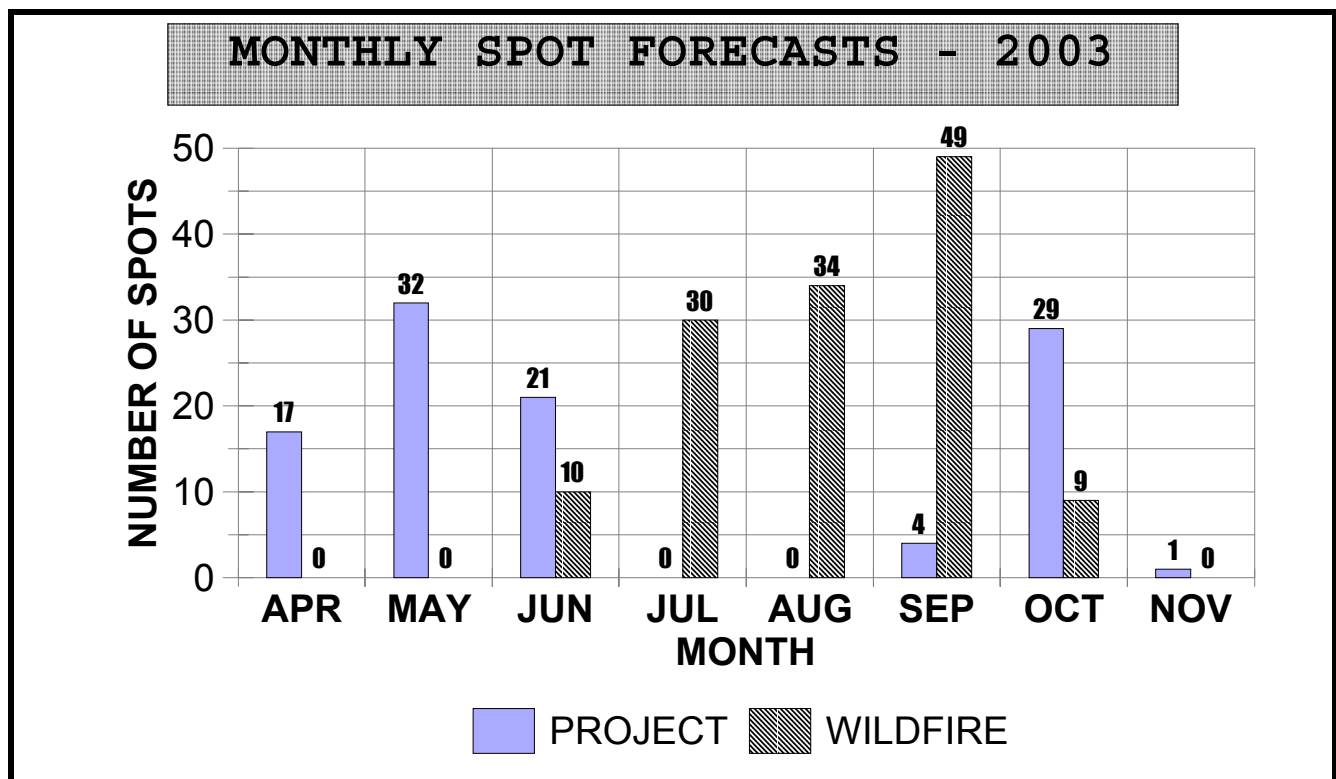
“Turn-Around Time” has been tracked since the 2000 season. It is defined as the elapsed time between spot request receipt (or notification) and forecast transmission. The Web-based spot program makes this element very easy to monitor. However, some complications continue for prescribed burns. Quite often the user-agency submits a spot request the day before actual ignition. Obviously, turn-around time is not applicable in these cases. The precedent for the Portland office is to disregard turn-around time for requests submitted in advance of the actual burn time.

The Memorandum of Understanding (MOU) between the Pacific Northwest Wildfire Coordinating Group (PNWCG) and Western Region of the National Weather Service (NWS) states that required turn-around times are 45 minutes for wildfire spot requests and 60 minutes for prescribed burns, unless prior arrangements have been made. The Portland office achieved a turn-around time of 39.7 minutes for prescribed burns (when turn-around time was applicable), and 33.9 minutes for wildfires. The average turn-around time for **ALL** spot forecasts in 2001 was 35.9 minutes. These turn-around times are much lower than 2002 and well within the required guidelines. Prescribed spot forecasts showed a 10 minute improvement (compared to 2002), wildfire spots forecasts had a four-minute turn-around time improvement, and overall the 2003 turn-around time was about seven minutes lower.

The longest turn-around time for a spot request was 136 minutes (October 27 for the Weiss Road #3 prescribed burn). This was an extreme case because the request came during a “rush” of spots and while the morning land management forecast was being created. Another unusual instance occurred July 19, 2003. A wildfire request was received after normal fire weather operations (0600 to 1600). The request was made at 1804, which required a qualified fire weather forecaster to be called back into the office to handle the request. The turn-around time for this request (the Odell fire) was 125 minutes. Typical turn-around times for wildfire spot requests were 20 to 30 minutes.

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FIGURE 2-2003 SPOT FORECASTS (BY MONTH)



The above chart does not include January through March (12 total prescribed burn spot requests), but rather the busiest part of the season (April through October) , with November included denoting the end of the season.



RAWS TIDBITS: RAWS input for NFDRS forecasts improved in 2003. However, there continues to be some problems with a few offices. The Eugene Interagency Dispatch Center missed just one day. The Warm Springs BIA only missed three days, but were late 33% of the time. The Mt. Hood NF missed 14 days (12%). Salem BLM missed 41 days (34%).

Forecasters continued to show improvement over persistence in temperature and humidity forecasts, but struggled with wind forecasts. The most problematic sites for wind were Goodwin Peak, Red Box Bench, Log Creek, and Abernathy Mountain.

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FIGURE 3- ANNUAL SPOT FORECAST TOTALS

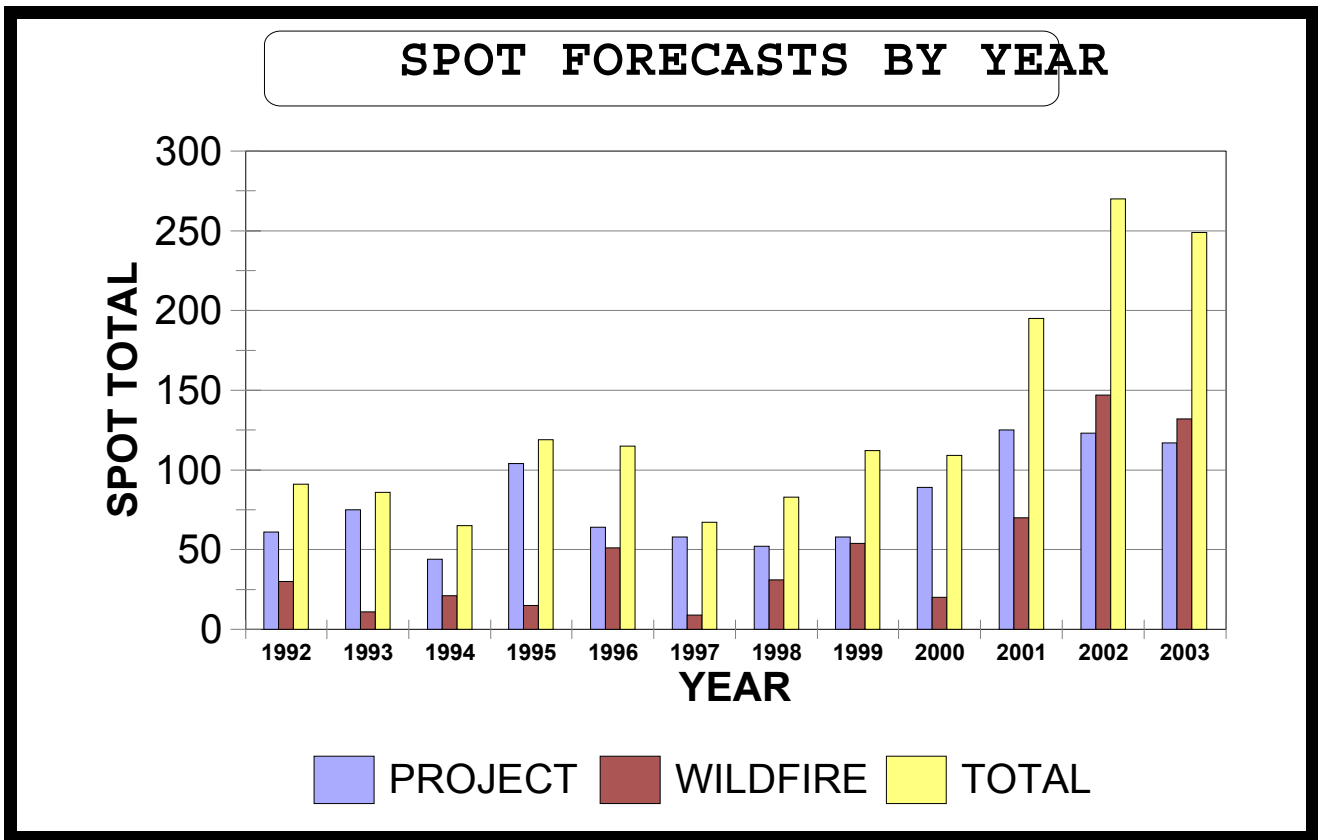


TABLE FOUR - ANNUAL SPOT FORECAST DATA

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
PROJECT	61	75	44	104	64	58	52	58	89	125	123	117
WILDFIRE	30	11	21	15	51	9	31	54	20	70	147	132
TOTAL	91	86	65	119	115	67	83	112	109	196	270	249

Notice the trend since 2000 (one of the most significant fire seasons on record). The spot load showed a dramatic increase from 2000 to 2001, and has remained quite high since 2001. The 2003 totals were slightly lower than 2002, but the Warm Springs BIA did not do any spring prescription burning. In addition, the BLM did not do as much prescription burning compared to previous years. Oregon Department of Forestry (ODF) had seven requests, most of them for the Columbia Gorge Fire.

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FORECAST SERVICES

The fire weather desk was staffed from March 17, 2003 through October 31, 2003. There was a spot forecast on November 5, but the fire desk was not staffed that day. Full fire weather operations (7 days a week) commenced on May 18, 2003. Portland and Pendleton decided to try a joint internet briefing for 2003. The goal was to try and consolidate all users into one briefing. These began the first week of June. It soon became evident that the joint-briefing approach would not work. There were too many different weather patterns to consider. The east side had different fire weather concerns than the west side. Portland reverted to its own briefing on June 15. Participation was sporadic. During active fire weather patterns there were several users on the briefing. However, participation was rather sparse during tranquil or non-critical weather patterns. Internet briefings ended October 10. The Portland office also participated in daily "blast-up" calls set up by the GACC. These calls started on June 16 and ended on October 4. The Portland office also supplied one person to the NW Coordination Center from March through the end of October.

TRAINING AND EDUCATIONAL OUTREACH ACTIVITIES

Portland continued to be heavily involved in teaching and training activities. Table 5 shows all of the outreach activities for 2003 (see page 42). The Portland office has several people involved in teaching. S-190, S-290, S-390, S-490 and S-590 are undergoing major revisions. Powerpoint presentations are being developed, to take the place of the slides and overhead projections. Although Pendleton will assume east side forecast responsibility, Portland will still be available for teaching and training services when needed.



2003 FIRE INFO OUTSIDE THE AREA: One of the larger fires in the Pacific Northwest was the Fawn Peak fire (Northern Washington). This fire burned 81,343 acres and cost nearly 40 million dollars. It started on June 29 (lightning) and wasn't contained until August 13. In 2003, the total acres burned (Oregon) was 321,836, compared to slightly over one million acres in 2002. Oregon BLM reported 241 fires for 7,726 acres. In 2002 Oregon BLM had 321 fires for 168, 306 acres.

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TABLE FIVE - TRAINING AND EDUCATIONAL OUTREACH ACTIVITIES

DATES	ACTIVITY	AGENCY/USER	INSTRUCTOR
January 27,28	SEMINAR	WILLAMETTE NF/BLM FMO'S	WEISHAAR
February	S-290	WARM SPRINGS BIA	SALTENBERGER
February	S-290	ODF in Clackamas	SALTENBERGER
March	S-190	ODF in Vancouver, WA	SALTENBERGER
March 22	S-190	ODF, in Tygh Valley	SALTENBERGER
March 3-7	RX-300	USFS	SALTENBERGER
March 27	S-290	WILLAMETTE NF	SALTENBERGER
April 15,16	S-290	MT. HOOD NF	WILLSON
April 23	S-190	ODF	SALTENBERGER
May 1,2	EASTSIDE VISIT	ODF/USFS/BIA	WEISHAAR
May 11	S-290	TUALATIN VALLEY FIRE	SALTENBERGER
May 18	S-190	DNR HOCKINSON	SALTENBERGER
May 27	S-190	MT. HOOD NF ZIGZAG	SALTENBERGER
May 27	S-190	TUALATIN VALLEY FIRE	SALTENBERGER
June 16	S-190	ODF/MT. HOOD NF	WEISHAAR
November 11-13	S-290	LAKE OSWEGO F.D.	SALTENBERGER
November 24,25	S-290	ODF HOOD RIVER	SALTENBERGER
June 17	S-190	USFS/ODF	SALTENBERGER
June 18, 19	S-290	USFS/ODF	SALTENBERGER
June 24, 25	S-290	ODF	SALTENBERGER
June 29	S-290	TUALATIN VALLEY FIRE	SALTENBERGER

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IMET DISPATCHES

The 2003 fire season was fairly busy in Oregon, but not as devastating as 2002. There were several project-sized fires. The B&B Complex was the largest and most high-profile fire. Fire activity was scattered through much of the state, but Central Oregon and the Central Cascades seemed the most active. Central Oregon (the Deschutes National Forest) had the Davis Fire at the end of June, the Link fire in mid-July, and the B&B Complex in late August. The Portland office has two qualified Incident Meteorologists (IMET's). However, one IMET spent a majority of the season detailed at the NW Coordination Center to provide extra support for decision-making and resource allocation. This was a very important mission to the NW Coordination Center.

The Portland office filled four IMET requests. Most of the deployments were for existing fires (swap-outs with other IMET's).

1. CLARK FIRE (14 DAYS)

IMET: John Saltenberger
DATES: July 13 through July 26
LOCATION: Willamette National Forest. Middle Fork district. ICP at Lowell.
IMT: NW Oregon Interagency Incident Command Team (Type II).
CAUSE: Lightning

2. CLARK FIRE (11 DAYS)

IMET: Scott Weishaar
DATES: July 25 through August 4 (Swap-out)
LOCATION: Willamette National Forest. Middle Fork district. ICP at Lowell.
IMT: NW Oregon Interagency Incident Command Team (Type II).
Transferred command to Blue Mountain Interagency Command Team (Type II) July 29.

3. BLACK CANYON FIRE (11 DAYS)

IMET: John Saltenberger
DATES: August 12 through August 22
LOCATION: Colville National Forest. ICP at Northport, WA.
IMT: Washington DNR Type II (Rex Reed's team).

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CAUSE: Lightning

4. DIRTY IKE AND STRAWBERRY FIRES (10 DAYS)

IMET: Scott Weishaar

DATES: August 15 through August 24

LOCATION: Lolo NF (MT). Dirty Ike ICP at Beavertail State Park (near Clinton).
Strawberry ICP at Rock Creek (5 miles east of Clinton).

IMT: DIRTY IKE: Chrissman's Type II Team

STRAWBERRY: WA-DNR Type II Team 3 (Berndt)

CAUSE: Lightning

2003 MAJOR FIRES

The Portland Fire Weather district experienced six "large" fires during the 2003 season (see Table 6). There were 12 "large" fires in 2002. A "large" fire is defined as:

100 acres or more in forest or 300 acres or more for rangeland, OR a Type II command level.

TABLE 6 - PORTLAND DISTRICT 2003 MAJOR FIRES

FIRE	START DATE	UNIT	CAUSE	SIZE (ACRES)	CONTAIN DATE	COST
Bear Lake	June 18	Willamette N.F.	Lightning	30	July 2	261K
Davis	June 28	Deschutes N.F.	Human	21,181	July 6	5.64 M
Link	July 5	Deschutes N.F.	Under Inv.	3,583	July 13	6.12 M
Clark	July 13	Willamette N.F.	Human	4,964	August 2	14.65 M
18	July 23	Deschutes N.F.	Human	3,809	July 26	1.43 M
B&B Complex	August 19	Deschutes N.F.	Lightning	90,769	October 13	41.20 M

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SUMMARY

The 2003 fire season was busy (as evidenced by the number of spot forecasts), but not to the degree of 2000 or 2002 (compared to total acres burned). Early-winter snowpack was sparse, but increased significantly at high elevations in late-winter and early spring. May was rather dry, which led to elevated early-season fuel indices. Occasional heat spells and above-normal lightning activity could have resulted in a much busier fire season. The major fire event of the season was the B&B Complex.

New Red Flag criteria were introduced in 2003, but proved to be inadequate. Further modification to the criteria have been developed and will be implemented in 2004. The east side zones will be turned over to the Pendleton forecast office in the spring of 2004.

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